

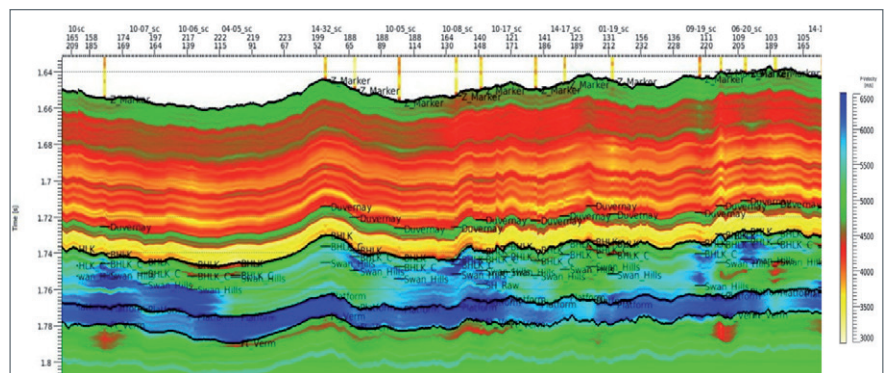
Velocity calibration and time-to-depth conversion

Jason® DepthMod™ is a velocity model calibration application that ensures calibrated models can be used to convert time data (inversions) to depth, which ties well tops. Part of the **Jason Workbench**, **DepthMod** can calibrate velocity functions for use in re-depting – ensuring that depth volumes provided by clients tie wells. Designed for engineers and quantitative interpretation teams who must plan wells in depth, **DepthMod** can obtain accurate reserve estimates and well planning in depth.

Facilitate time-to-depth conversion in reservoir characterization projects

The purpose of the **Jason DepthMod** application is to calibrate velocity models to well tops in depth and to perform time-to-depth (TD) conversion:

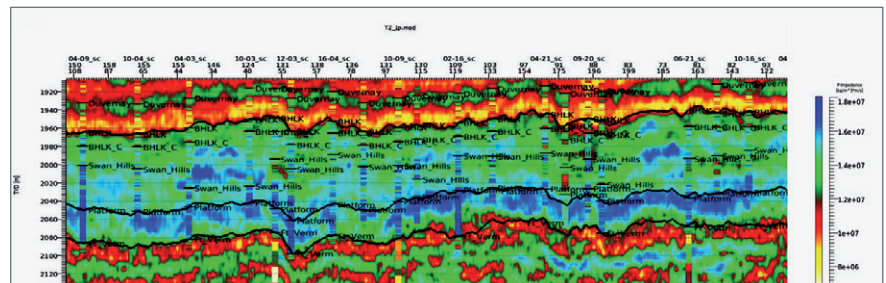
- Interactive velocity calibration and correction
- Time-to-depth conversion
- Create a TD relation and assign it to selected data files. The assigned TD relation can then be used to view the files in **Jason Viewers** in both time and depth. It also facilitates depth inversions by admitting depth inputs to selected **Jason** applications



The velocity model was calibrated to ensure that depth-converted horizons tied their well top counterparts.

The **DepthMod** workflow is designed to handle all the circumstances which might arise in the completion of reservoir characterization projects.

- No wells available, horizons only
- No wells available, horizons and seismic velocities only
- Horizons and wells available
- Horizons, wells, and seismic velocities available



This arbitrary line through all the wells shows how the depth-converted property data ties the well logs.

DepthMod

The Jason advantage

Complex, fully 3D models incorporating lateral velocity changes and faults can be used to effect accurate time-to-depth conversions about User-defined time and depth datums.

Key features

- **DepthMod** has been designed to calibrate velocity models for time-to-depth conversion and depth-to-time conversion within selected **Jason** applications. This makes Well Tying, Wavelet Estimation and Inversion with depth inputs possible. A wide variety of initial data scenarios are addressed
- **DepthMod** consists of three main elements:
 - Velocity Calibration: to ensure that depth conversions from time tie well log tops in depth
 - Time <--> Depth Conversion: to convert any horizon data or any property data from time to depth or vice versa, using a calibrated velocity model
 - You can also create and assign a TD relation to selected files or directories

Operating system requirements

The following operating systems and graphics systems are supported:

Linux™ Red Hat® Enterprise 4, 5 or 6

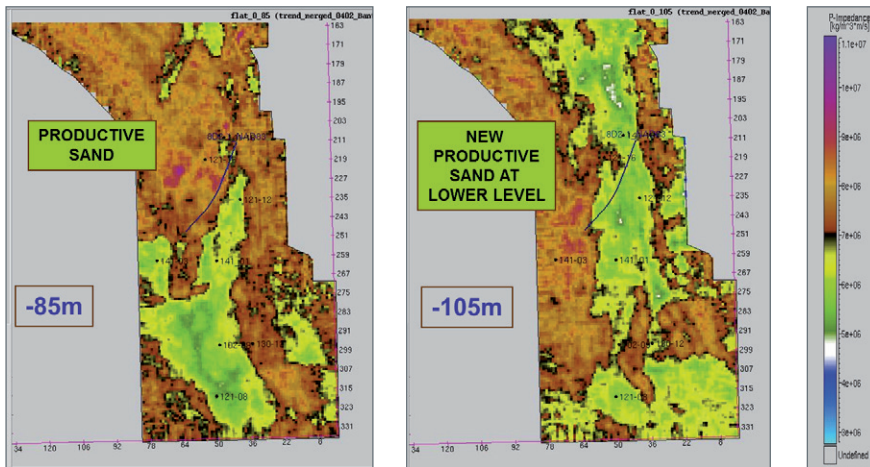
Linux™ SUSE™ 11.x, Enterprise (SLES10)

Windows® (32 & 64 bit) – XP SP3, Vista™, Windows® 7

Requires NVIDIA® graphics

Interoperability

Jason Workbench



Impedance from seismic inversion was converted to depth. Two prospective sandstone intervals were defined and mapped.

Regional Contacts

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